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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,201	09/10/2003	Dierk Schroder	P23958	3231

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EXAMINER

ROSENBERGER, RICHARD A

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,201

Applicant(s)

SCHRODER ET AL.

Examiner

Richard A. Rosenberger

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,9-27,29-40,42-46 and 48-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,9-27,29-40,42-46 and 48-51 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Art Unit: 2877

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (US 4,171,161) in view of Evans (US 4,213,707) and Laliotis (4,152,767).

For all the claims, the following discussion applies.

Jung teaches a system capable of measuring length (figure s 1-4c) and diameter (figures 5 and 6) of elongated objects. Taking the configuration of the system and movement of the object being measured in figure 1 of Jung with the illustrated configurations and relative positions of detectors 22 and 23 and the object tin figures 2a-4c, it is at least obvious that the configuration could be such that the objects 10 be conveyed lengthwise in an axial manner; that is certainly the most reasonable understanding of the reference.

Evans shows a system in which the diameter of bar shaped objects, specifically including filter bars of the tobacco industry (column 4, lines 32-35). The reference mentions that the type of system used therein can be used with moving objects (the sentence bridging columns 1 and 2); using as an example monitoring the diameter of a wire being drawn of extruded; those in the art would understand this to include moving lengthwise in an axial manner as claimed. The Evans reference mentions making length measurements (column 2, lines 10 and 12).

Laliotis teaches measuring both the length and diameter of a “bar-shaped object”, such as a log; see column 7, lines 59 and 60 for a teaching that diameter is determined and column 8, line 23 for a teaching that length is determined. Note also that the object is being conveyed lengthwise in an axial manner through the measurement area.

Given the teaching of Jung and Laliotis of measuring the diameter and lengths of objects as they are being conveyed axially through the measurement area, it would have been obvious to measure the length and diameter of filter rods as they are being conveyed lengthwise as taught to be useful in Evans.

The references teach conveying the objects through the measuring area; using known conveying mechanisms, as in claims 30 and 31, would have been obvious. As in claims 25-27 32 and 33, it would have been obvious to move the objects being inspected to an appropriate known useful receptacle in a known manner after inspection.

As for claim 9, the measuring systems of the references of Evans and Laliotis both measure the diameters of the system several times; as is known in the art, such repeated measurements will improve accuracy and would have been obvious. As in claims 10, 36, 42, and 48, Jung shows measuring length and measuring diameter; it would have been obvious to include a diameter sensor, as in figures 5 and 6 of Jung, in the length measuring systems such as shown in figures 2a-4c of the system when both measurements are of interest; such a combination is simple and direct, accomplished simply by placing the diameter sensor between the length sensors. Such an obvious arrangement would measure the length and width simultaneously.

Using such an optical sensor in a system which also has other known useful tests, such as the known pneumatic test of claim 11, would have been obvious.

Removing articles being measured for the line when the measurement indicates they are imperfect is known (see for instance Jung, figure 4c, with the illustrated reference, comparator, and ejector, as in claims 12, 13, 38, 39.

Note the light barrier at 50 in figure 1 of Jung for triggering a start signal as in instant claims 14 and 15.

As for claims 16 and 50, the length of the object is of course measured in the end areas of the object; measuring the diameter in any position along the object which is of interest would have been obvious.

As in claims 17-22, 34, 43, 44, 49, Jung shows having two measuring points and measuring the lengths by determining the amount of light from a light source blocked by the object. This blocking of the light is inherently "based upon brightness profile". The use of known, commercially available light sources, such as a laser, for the light source as in claim would have been obvious. The use of known and commercially available sensors for sensing the passage of the object, including known and available line sensors, as in claims 23, 24 and 35, would have been obvious, as would have been the use of mirrors to fold the light path as convenient for the particular use at hand, as in claims 37.

3. Claims 45 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (US 4,171,161) in view of Evans (US 4,213,707) and Laliotis (4,152,767), as applied to claims 40 and 46 above, and further in view of Harris (US 4,043,673).

It is known to effectively duplicate the measurement arrangement to measure the diameters in two orthogonal directions; see figure 9 of Harris. It would have been

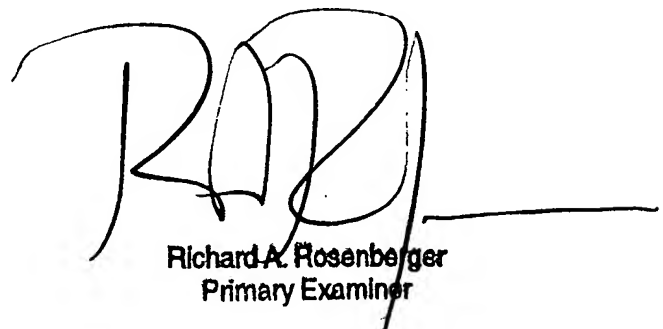
obvious do so in the systems of claims 40 and 46 to obtain the art-recognized benefits of this increased information about the shape of the objects.

4. There appears to be allowable subject matter disclosed in this application, although it does not appear to be claimed with the specificity needed to distinguish over the art. For example, the arrangement instant figure 8 appears to be contain allowable subject matter, but the claims do not appear, for example, to go beyond the mere obvious inclusion of some very general inclusion of "at least one mirror and a mirror arrangement" in claims 37, which is not of sufficient specificity to distinguish this arrangement over the obvious general inclusion of mirrors in the system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger
30 May 2006



Richard A. Rosenberger
Primary Examiner